EXCERPTS OF PROPOSED REGULATION ORDER MODIFIED TEXT
SHOWING MODIFICATIONS MADE AVAILABLE WITH SECOND "15-DAY" NOTICE

Amendments to California Zero Emission Vehicle Regulation – Section 1962, Title 13, California Code of Regulations – and Related Provisions

Set forth below are the proposed amendments to the California zero emission vehicle (ZEV) regulation, and the incorporated "California Exhaust Emission Standards and Test Procedures For 2003 and Subsequent Model Zero-Emission Vehicles, and 2001 And Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck And Medium-Duty Vehicle Classes." The text of the originally proposed amendments is shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. The proposed modifications to the original proposal that were made available by the first "15-day" notice on October 31, 2001 are shown in double underline to indicate additions and ~~double strikeout~~ to show deletions. The additional proposed modifications made available by the second "15-day" notice on November 19, 2001 are shown in **bold double underline** to indicate additions and **~~bold double strikeout~~** to show deletions. The italicized, indented commentaries explain the rationale for the proposed modifications to the original proposal, and are not part of the regulations; commentaries for the second set of modifications are in ***bold italics***. Subsection headings shown in *italics* are to be italicized in Barclays California Code of Regulations.

Various portions of the regulation that are not modified by second set of modifications are omitted from the text shown, and those omissions are indicated by " * * * *"

PROPOSED REGULATION ORDER WITH MODIFIED TEXT

AMENDMENTS TO THE CALIFORNIA ZERO-EMISSION VEHICLE REGULATION

Amend section 1962, title 13, California Code of Regulations, to read as follows:

§ 1962. Zero-Emission Vehicle Standards for New 2003 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles.

* * * *

(c) *Partial ~~and Full~~ ZEV Allowance Vehicles (PZEVs).*

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(4) ~~*Partial*~~ *PZEV Allowance for Advanced ZEV Componentry.* A vehicle that meets the requirements of section 1962(c)(2) but does not qualify for any zero-emission VMT ~~partial~~ PZEV allowance under section 1962(c)(3) ~~shall~~ may qualify for an advanced componentry ~~partial~~ PZEV allowance ~~of 0.1~~ ~~0.25, if the manufacturer demonstrates to the reasonable satisfaction of the Executive Officer that the vehicle is equipped with advanced ZEV componentry such as an advanced battery integral to the operation of the vehicle power-train or an electric power-train~~ as provided in this section 1962(c)(4).

(A) *Use of High Pressure Gaseous Fuel or Hydrogen Storage System*. A vehicle equipped with a high pressure gaseous fuel storage system capable of refueling at 3600 pounds per square inch or more and operating exclusively on this gaseous fuel shall qualify for an advanced componentry PZEV allowance of 0.1. A vehicle fueled exclusively by hydrogen stored in a high pressure system capable of refueling at 3600 pounds per square inch or more, or stored in nongaseous form, shall also qualify for an advanced componentry PZEV allowance of 0.1.

(B) *Other Advanced Componentry.* A vehicle shall qualify for an additional advanced componentry allowance if the manufacturer demonstrates to the reasonable satisfaction of the Executive Officer that the vehicle is equipped with advanced ZEV componentry such as an advanced battery integral to the operation of the vehicle power train or an electric power train. The allowance earned by a vehicle shall be calculated according to one of the following methods, as elected by the manufacturer:

1. *CO_2 Reduction Method.*

a. *General.* A vehicle whose operation results in reduced CO_2 emissions as compared to the average vehicle in its class may qualify for an additional advanced componentry allowance in accordance with this section (c)(4)(B)1.. The vehicle's class is determined in accordance with section 1962(e)(3).

b. *Equation for Determining Additional Allowance.* The following equation is used to calculate the additional allowance, provided that in order to earn any additional allowance, the CO_2 Savings must be at least 39,000:

Advanced Componentry Allowance = CO_2 Savings ÷ 250,000

Where: CO_2 Savings = (Class Average CO_2 Production) – (Vehicle CO_2 Production)
Vehicle CO_2 Production = (150,000 ÷ CMPEG) × 19.564
CMPEG is determined in accordance with section (e)(2)
Class Average CO_2 Production for the 2000-2007 model years is determined using the following table:

Vehicle Class	*Class Average CO_2 Production, 2000-2007 MY*
Subcompact PC	95, 902
Compact PC	96,533
Midsize PC	108,689
Large PC	114,633
Small Truck	117,384
Medium Truck	137,131
Large Truck	161,242

Class Average CO_2 Production for the 2008-2014 model years is determined in accordance with the following equation:

Class Average CO_2 Production = (150,000 / Baseline Fuel Economy for model years 2008-2014) × 19.564

Where: Baseline Fuel Economy for model years 2008-2014 means Baseline Fuel Economy for either the 2008-2011 or 2012-2014 model years, as applicable, as determined in accordance with section (e)(5).

c. *Alternative Method for Determining CO_2 Savings of a Vehicle That Is Not Gasoline-Fueled.* For purposes of the equation in section (c)(4)(B)1.b., the Executive Officer shall approve an alternative method for determining CO_2 savings of a vehicle that is not gasoline-fueled, if the manufacturer submits the alternative method with an engineering evaluation that demonstrates to the reasonable satisfaction of the Executive Officer that the alternative method fairly represents the CO_2 impacts of the vehicle.

2. *Alternative **Efficiency** Methods for the 2000 – 2007 Model Years.*

a. ***General.* For the 2000-2007 model years only,** a **A** manufacturer may elect to have a vehicle's additional advanced componentry allowance determined according to the Efficiency Method **in section (c)(4)(B)2.b. or the Peak Power Method in section (c)(4)(B)2.c., in which case the allowance**

b. ***Efficiency Method.* The additional advanced componentry allowance using the efficiency method** shall be determined in accordance with the following equation:

Advanced Componentry Allowance = ((CMPEG / **(**1.3 * Baseline Fuel Economy**)**) – 1) * 0.5

Where: CMPEG is determined in accordance with section (e)(2).
Baseline Fuel Economy is determined in accordance with section (e)(4).

A vehicle earning an Efficiency Method advanced componentry allowance of less than zero pursuant to this subsection will be treated as having an Efficiency Method advanced componentry allowance of zero.

Commentary: The primary additional modification to this subsection made in connection with the second 15-day notice is to remove the limitation that the optional efficiency method was only available through the 2007 model year. Public comments received on the October 31, 2001 proposed modifications argued that under the CO2 savings method, the credits earned by smaller vehicles are limited because the amount of CO2 generated by such vehicles is small. As a result, the potential CO2 savings likewise is small. The comments went on to argue that such small vehicles are beneficial in air quality, energy and CO2 terms, and should not be discouraged relative to larger less efficient vehicles.

Because the overall credit calculation includes an efficiency multiplier even when the CO2 method is chosen, staff believes that the CO2 method provides a balanced approach that recognizes both relative efficiency within a vehicle class and absolute improvement in CO2 production. Nevertheless staff recognizes that smaller vehicles will not score as highly on the CO2 method as on the efficiency method. To avoid providing any disincentive to the aggressive pursuit

of high efficiency vehicles over the long term, staff now proposes that the option of the efficiency path continue past the 2007 model year.

The correction to the formula removes an ambiguity and clarifies the underlying intent. Staff had intended that the additional last sentence be included in the October 31, 2001 proposed modifications, but it was inadvertently omitted. The approach was suggested by a manufacturer to ensure that nonqualifying systems cannot incur a negative allowance.

~~c.~~ **3.** ***Alternative*** *Percent Peak Power Method* ***For the 2000-2007 Model Years***. **For the 2000-2007 model years only, a manufacturer may elect to have a vehicle's** ~~The~~ additional advanced componentry allowance **determined** using the Percent Peak Power method**, in which case the allowance** shall be determined in accordance with the following equation:

Advanced Componentry Allowance = Percentage of "maximum available power" from the electric storage device

Where: Percentage of "maximum available power" means the maximum system power output available from the electrical storage device divided by the sum of the electrical storage device and the SAE net power of the heat engine.

In order to earn any score using the Percent Peak Power method a vehicle must be able to recover kinetic energy through regenerative braking~~, have idle stop capability,~~ and provide at least 13 percent of "maximum available power" from the electrical storage device.

Commentary:

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Public comment received on the October 31, 2001 proposed modifications asserted that the requirement for idle stop capability to qualify for an advanced componentry allowance using the percent peak power method was unduly restrictive and would preclude certain design approaches. Staff concurs and now proposes that the requirement be deleted. The model year references have been shifted from former (c)(4)(B)(2)a. and do not change the effect of the provisions on the peak power method.

(5) ~~*Partial*~~ *PZEV Allowance for Low Fuel-Cycle Emissions.* A vehicle that uses fuel(s) with very low fuel-cycle emissions shall receive a ~~partial~~ PZEV allowance not to exceed 0.2. In order to receive the fuel-cycle ~~partial~~ PZEV allowance, a manufacturer must demonstrate to the Executive Officer, using peer-reviewed studies or other relevant information, that NMOG emissions associated with the fuel(s) used by the vehicle (on a grams/mile basis) are lower than or equal to 0.01 grams/mile. Fuel-cycle emissions must be calculated based on near-term production methods and infrastructure assumptions, and the uncertainty in the results must be quantified. The fuel-cycle ~~partial~~ PZEV allowance is calculated according to the following formula:

~~Partial~~ PZEV Fuel Cycle Allowance = 0.2 x [(percent of VMT using fuel(s) meeting the requirements of the preceding paragraph)/ 100]

A manufacturer's demonstration to the Executive Officer that a vehicle qualifies for a fuel-cycle ~~partial~~ PZEV allowance shall include test results and/or empirical data supporting the estimate of the relative proportion of VMT while operating on fuel(s) with very low fuel-cycle emissions.

Commentary: *The nonsubstantive modifications make the terminology consistent.*

(6) *Calculation of Combined PZEV Allowance for a Vehicle.* The combined PZEV allowance for a qualifying vehicle in a particular model year is the sum of~~:~~ the PZEV allowances listed in this section 1962(c)(6), multiplied by any PZEV introduction phase-in multiplier or PZEV high efficiency multiplier listed in section 1962(c)(7) (if a **2002 through** 2005 model-year PZEV qualifies for both multipliers listed in section 1962(c)(7), the product of the two multipliers is used as the PZEV multiplier).

Commentary: This modification conforms to the modification in section (c)(7)(B) below, in which the effective date of the high-efficiency multiplier for PZEVs is moved up to the 2002 model year.

(A) *Baseline PZEV Allowance.* The baseline PZEV allowance of 0.2 for vehicles meeting the criteria in section 1962(c)(2);

(B) *Zero Emission VMT PZEV Allowance.* The zero-emission VMT PZEV allowance, if any, determined in accordance with section 1962(c)(3)~~, not to exceed 0.6~~;

(C) *Advanced ZEV Componentry PZEV Allowance.* The advanced ZEV componentry PZEV allowance, if any, determined in accordance with section 1962(c)(4)~~, not to exceed 0.1 0.25~~; and

(D) *Fuel-cycle Emissions PZEV Allowance.* The fuel-cycle emissions PZEV allowance, if any, determined in accordance with section 1962(c)(5)~~, not to exceed 0.2~~.

Commentary: *These modifications reflect the modifications to subsections (c)(3) and (4) above.*

(7) *PZEV Multipliers.*

(A) *PZEV Introduction Phase-In Multiplier*. Each 2000 through 2005 model-year PZEV that is produced and delivered for sale in California qualifies for a PZEV introduction phase-in multiplier as follows:

	MY 2000-2003	*MY 2004*	*MY 2005*
Multiplier	4.0	2.0	1.33

(B) *AT PZEV High-Efficiency Multiplier.* An AT PZEV qualifies for a full high-efficiency multiplier in accordance with section 1962(e) starting with the ~~2005~~ 2002 model year.

***Commentary**: The proposed model year modification moves up the effective date of the efficiency multiplier for AT PZEVs to the 2002 model year. This conforms to other changes made regarding the calculation of the advanced componentry allowance. As discussed in the commentary to section 1962(e)(1), staff's original intent was that the high-efficiency multiplier be available to ZEVs and AT PZEVs only.*

(C) *Introduction Phase-In Multiplier for PZEVs with > 10 Mile Zero Emission Range*. Each 2000 through 2011 model year PZEV with > 10 miles zero emission range that is produced and delivered for sale in California qualifies for a phase-in multiplier as follows:

	MY 2000-2007	**MY 2008-2009**	**MY 2010-2011**
Multiplier	**2.0**	**1.5**	**1.25**

Commentary: At the January 25, 2001 Board meeting, the Board directed staff to remove grid connect hybrid vehicles from the top two percent, but provide increased incentives within the AT PZEV category. Public comments received on the October 31, 2001 staff proposed modifications noted that the credit levels provided for grid connect hybrid vehicles, when all factors are taken into consideration, are lower under the staff proposed modifications than under the December staff proposal. To provide additional incentives for such vehicles, staff now proposes the addition of a phase-in multiplier. This multiplier extends beyond the basic PZEV early introduction multiplier because it is unlikely that any such vehicles will be produced until the 2005 model year or beyond.

* * * *

(e) *ZEV and Advanced Technology PZEV High Efficiency Multipliers*

(1) *Eligibility.* Beginning with the 2005 model year **for ZEVs and the 2002 model year for advanced technology PZEVs**, both ZEVs and advanced technology PZEVs are eligible for a high efficiency multiplier. A NEV ~~or other vehicle unable to maintain the speed and time tolerances contained in 40 CFR 86.115-00 (b)(1)and (2) (as effective July 1, 2000) for at least one cycle of both the UDDS and HFEDS~~ is not eligible to earn an efficiency multiplier. A vehicle earning an efficiency multiplier value of less than 1.00 pursuant to section 1962(~~e~~e)(3) will be treated as having an efficiency multiplier of 1.

***Commentary:** The modifications reflect staff's original intent that the efficiency multiplier applies to ZEVs and AT PZEVs only. In addition, staff's intent is that*

the efficiency multiplier be available to City EVs. The deleted language would have prevented City EVs from qualifying. ***The additional modification conforms to the modification in section (c)(7)(B) above, in which the effective date of the high-efficiency multiplier for PZEVs is moved up to the 2002 model year.***

(2) *Calculation of CMPEG Rating.* For all vehicle types, a CMPEG (California miles per equivalent gallon) rating is determined as follows:

(A) For gasoline-fueled vehicles and HEVs with <~~20~~ 10 mile zero-emission range, CMPEG = Combined Fuel Economy determined in accordance with 40 CFR Part 600 = 1/ [.55 / (EPA city mpg, unadjusted) + .45 / (EPA highway mpg, unadjusted)].

(B) For BEVs and off-vehicle charge capable HEVs with ≥ ~~20~~ 10 mile zero-emission range, CMPEG = [33,705 AC whr/gal / (.55 (AC whr/mile UDDS) + .45 (AC whr/mile HFEDS))] where AC whr/ mile values are determined in accordance with section E.3. "Determination of All-Electric Range-Urban," and "Determination of All-Electric Range-Highway" of the "California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes," as incorporated by reference in section 1962(h). Qualifying HEV CMPEG determination shall be based solely on electric mode operating efficiency for vehicles that are able to maintain test cycle speed and time tolerances for the entire zero-emission range test.

Commentary: *The modifications reflect modifications to section 2262(c)(3)(A) involving the calculation of allowances for zero emission VMT for grid connect HEVs.*

(C)**1.** For vehicles operating on an alternative fuel **other than hydrogen**, including CNG~~,~~ **or** alcohol, ~~**or hydrogen,**~~ CMPEG = Combined Fuel Economy as determined in accordance with 40 CFR Part 600. Alternate fuel vehicle CMPEG shall not be compensated with the federal (1/0.15) "fuel content" factor used in determining average fuel economy.

2. For vehicles operating on hydrogen, CMPEG shall be determined by converting the combined fuel economy value measured on the basis of miles-per-kg of hydrogen (MPkg) into CMPEG as follows:

Hydrogen MPkg x (1.0 kg H2/gallon gasoline) = CMPEG

Commentary: 40 CFR Part 600 does not contain a conversion methodology for hydrogen. Staff therefore has developed a conversion factor based on the lower heating value of hydrogen.

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(4) *High efficiency multipliers for the 2002-2007 model years.* For model years 2002-2007, the efficiency multiplier for each vehicle class is determined according to the following equation:

High Efficiency Multiplier = CMPEG / **(**1.5 * Baseline Fuel Economy**)**

Where: Baseline Fuel Economy is determined in accordance with the following table:

Vehicle Class	*Baseline Fuel Economy MY 2002-2007*
Subcompact PC	30.6
Compact PC	30.4
Midsize PC	27.0
Large PC	25.6
Small Truck	25.0
Medium Truck	21.4
Large Truck	18.2

(5) *High efficiency multipliers for the 2008~~-2014~~ **and subsequent** model years.* For **the 2008 and subsequent** model years ~~**2008-2014**~~, the efficiency multiplier for each vehicle class is determined in accordance with the following equations:

For ZEVs and PZEVs with > 10 mile Zero Emission Range: Efficiency multiplier = CMPEG / (2.0 * Baseline Fuel Economy)

For all other AT PZEVs: Efficiency multiplier = CMPEG / (~~**15**~~ **1.5** * Baseline Fuel Economy)

Where: *Baseline Fuel Economy* for model years 2008-2011 is the model year 2004 unadjusted-combined federal sales-weighted fuel economy for the vehicle class as determined by U.S. EPA. For a City Vehicle, the baseline fuel economy is 45.9.

Baseline Fuel Economy for Model Years 2012-2014 is the model year 2008 unadjusted-combined federal sales-weighted fuel economy for the vehicle class as determined by U.S. EPA. For a City Vehicle, the baseline fuel economy is 45.9.

***Baseline Fuel Economy* for model years 2015 and beyond shall be determined using the same methodology.**

Commentary:

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The second set of modifications correct an error in the equation and establish a mechanism for determining high-efficiency multipliers in the 2015 and subsequent model years.

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(f) *In-Service Warranty Multiplier for ZEVs and PZEVs With ~~3~~~~20~~10 Mile Zero Emission Range*. Except in the case of a NEV, an additional ZEV or PZEV multiplier will be earned for the 2001 through 2011 model years by a ZEV or a PZEV with ≥~~20~~10 mile zero emission range whose zero-emission energy storage or conversion system is under an original warranty from the vehicle manufacturer beyond three years of service and is registered for operation on public roads in California. For the 2001 through 2007 model years, a ~~M~~manufacturer~~s~~ will receive 0.1 times the ~~**original**~~ ZEV credit earned by the vehicle if it were leased or sold new in that year, including multipliers,~~(including multipliers other than the ZEV phase-in multiplier in section 1962(d)(3)(A) and the PZEV introduction phase-in multiplier in section 1962(c)(7))~~ on a year-by-year basis beginning in the fourth year. For the 2008 through 2011 model years, a manufacturer will receive 0.05 times the ~~**original**~~ ZEV credit earned by the vehicle if it were leased or sold new in that year, including multipliers, on a year-by-year basis beginning in the fourth year. The warranty multiplier is reported and earned in the year following each continuous year of service. **ZEVs, other than NEVs, re-leased prior to January 25, 2001 for a period beyond three years of service will earn an additional ZEV multiplier of 0.1 times the ZEV credit earned by the vehicle if it were leased or sold new in that year, including multipliers, for each additional year that they are in service and registered for operation on public roads in California. Such vehicles are not required to have the zero emission energy storage or conversion system under an original warranty from the vehicle manufacturer.**

Commentary: *The proposed modifications tie the credit earned by a vehicle under an extended warranty to the credit that would be earned by a new vehicle in that same year, better reflecting the relative value of the vehicle to the manufacturer. This has the effect of increasing the value of the warranty credit in early years and reducing it in later years. Thus the modifications will increase the effective number of vehicles required in later years and mitigate an effect that could work against the doubling of vehicles that was directed by the Board.*

The proposed modifications also phase out the in-service multiplier. The potential number of credits earned each year under this warranty increase over time, due to the increasing number of vehicles on the road. Phasing out the warranty credit in 2012 provides greater certainty that the number of vehicles delivered for sale in future years will meet the targets established by the Board.

Under the modified language, "re-leased" vehicles (for example MOA vehicles or vehicles that had originally been leased in other states) are eligible to earn the extended warranty credit.

The word "original" was inadvertently retained from a previous version of the regulation, and is deleted to clarify the intent of the subsection.

Public comments in response to the October 31, 2001 proposed modifications noted that some ZEVs were re-leased, for an extended period of service beyond three years, prior to the Board's January 25 action specifying that such vehicles needed to have an original warranty in order to earn additional credit. Staff believes that such early re-leases supported the purposes of the ZEV program, and at the time of the re-leases manufacturers were unaware that a warranty would be needed. Therefore staff has proposed an additional modification adding the last two sentences of the subsection to allow such vehicles to earn additional credit.

(g) *Generation and Use of ZEV Credits; Calculation of Penalties*

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(5) *ZEV Credits for Transportation Systems.*

(A) *General.* In model years 2001 through 2007, a~~A~~ ZEV, advanced technology PZEV or PZEV ~~or extended range HEV~~ placed as part of a transportation system may earn additional ZEV credits, which may used in the same manner as other credits earned by vehicles of that category, except as provided in section (g)(5)(C) below ~~from advanced technology PZEVs~~. A NEV is not eligible to earn credit for transportation systems. To earn such credits, the manufacturer must demonstrate to the reasonable satisfaction of the Executive Officer~~, prior to certification,~~ that the vehicle will be used as a part of a project that uses an innovative transportation system~~, that will effectively link homes, transit systems and jobs (e.g. a station car). Such systems are to be designed to evaluate the benefits and issues related to the~~

(B) *Credits Earned.* In order to earn additional credit under this section (g)(5), a project must at a minimum demonstrate [i] shared use of ZEVs, AT PZEVs or PZEVs, and [ii] the application of "intelligent" new technologies such as reservation management, card systems, depot management, location management, charge billing and real-time wireless information systems. ~~The additional ZEV credit may not exceed the original ZEV credit earned by the vehicle, including multipliers other than the ZEV phase-in multiplier in section 1962(d)(3)(A).~~ If, in addition to factors [i] and [ii] above, a project also features linkage to transit, the project may receive further additional credit. **For ZEVs only, not including NEVs, a project that features linkage to transit, such as dedicated parking and charging facilities at transit stations, but does not demonstrate shared use or the application of intelligent new technologies, may also receive additional credit for linkage to transit.** The maximum credit awarded per vehicle shall be determined by the Executive Officer, based upon an application submitted by the manufacturer and, if appropriate, the project manager. The maximum credit awarded shall not exceed the following:

Type of Vehicle	*Shared Use, Intelligence*	*Linkage to Transit*
PZEV	2	1
Advanced Technology PZEV	4	2
ZEV	6	3

Commentary: Public comments received on the October 31, 2001 staff proposed modifications described possible projects in which customers leasing City EVs are provided dedicated parking spaces, charging facilities at the station and at home, and a subsidized transit pass. Such projects have the potential to increase transit ridership and enhance the visibility and public appeal of ZEVs. Staff accordingly concurs that such projects should be able to earn additional credit, upon review of an application submitted by the manufacturer and if appropriate the project manager.

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~~(5)~~(6) *Submittal of ZEV Credits.* A manufacturer may meet the ZEV requirements in any given model year by submitting to the Executive Officer a commensurate amount of ZEV credits consistent with section 1962(b). These credits may be earned previously by the manufacturer or acquired from another manufacturer~~.~~**, except that beginning with the 2006 model year credits earned from NEVs offered for sale or placed in service in model years 2001 through 2005 cannot be used to satisfy more than the following portion of any program category (ZEV, AT PZEV, PZEV):**

2006	**2007 and beyond**
75%	**50%**

This limitation applies to credits earned in model years 2001 through 2005 by the same manufacturer or earned in model years 2001 through 2005 by another manufacturer and acquired The amount of ZEV credits required to be submitted shall be calculated according to the criteria set forth in this section 1962~~(d)~~(g).

Commentary: Throughout the Biennial Review process and the consideration of the ZEV regulation, one fundamental underlying objective of the Board has been to encourage a smooth, orderly progression in ZEV development and availability. That philosophy accounts for many features of the modified regulation, which in general provides considerable flexibility and aggressive incentives in the early years, many of which are phased out in the 2007-2012 timeframe as the technology matures.

The Board recognized that NEVs could play a role in this overall progression, providing a low-cost alternative to manufacturers in the near term while introducing the public to electric transportation and satisfying various specialized applications. Thus the Board adopted the staff recommendation that NEVs be granted early introduction credits, which then phased down to the 0.15 level by model year 2006.

Public comments on the October 31, 2001 staff proposed modifications have pointed out, however, that the NEV early introduction incentives could in some scenarios jeopardize the attainment of the "red line" as directed by the Board. Specifically, the introduction of large numbers of NEVs in the 2001-2002 model years could allow manufacturers to earn sufficient credits to completely "walk away" from the ZEV program for a number of years; plausibly through 2008 and beyond.

Staff agrees that the possibility of such a significant blackout period in ZEV availability is of concern and is contrary to the direction provided to staff by the Board at the January 25, 2001 hearing. Staff also recognizes that manufacturers have made product planning decisions based on the regulatory structure as proposed. Therefore it is necessary to provide sufficient lead time prior to any changes. Accordingly, staff proposes to limit the extent to which "banked" NEV credits can be used to satisfy ZEV obligations, beginning in the 2006 model year. The proposed modifications will not affect any strategy that is based on an ongoing, sustainable introduction of ZEV and near ZEV vehicles. Rather, it only constrains approaches that would use large numbers of banked NEV credits to avoid any meaningful participation in the ZEV and near-ZEV market in the 2006 model years and beyond.

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Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43104 and 43105, Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43204, and 43205.5, Health and Safety Code.

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